



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,624	08/31/2001	Albert Dónald Darby JR.	GEH01 297 DIV	8374

7590 03/19/2004  
Duane Morris LLP  
1667 K Street, N.W.  
Suite 700  
Washington, DC 20006

EXAMINER

CROSLAND, DONNIE L

ART UNIT	PAPER NUMBER
----------	--------------

2636

DATE MAILED: 03/19/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/942,624

Applicant(s)

DARBY ET AL.

Examiner

DONNIE L. CROSLAND

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003 and 17 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-50 and 52-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-50 and 52-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Prosecution Application***

The request filed on 9-22-03 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/942,624 is acceptable and a CPA has been established. An action on the CPA follows.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 22, 23, 26-35, and 37-50, and 52-57 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Stevens et al.

Stevens shows the method and apparatus of determining the physical order of plural railcars in a train consist where the railcars are connected clearly provides for providing a parameter which varies along the length of the train and transmitting a synchronization signal along the length of train to the local nodes at each car.

Stevens provides for the transmission of a second signal, which propagates through the train at a slower rate than the sync signal and then measuring the difference in time between the receipt of the sync and serial signal at each node.

Stevens provides for the sync and serial signal may be transmitted in any order with one beginning the time period and the other ending the time period. This information is used for serialization.

Stevens provides for the sync and serial signal for transmission through two different mediums, for example, the sync signal is electric and the second signal is a fluid signal transmitted through a brake pipe, col. 2, lines 1-15.

See col. 4 for RF transmission, pneumatic pressure pulse, and different times of arrival.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 24, 25, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens et al.

Stevens suggest maintaining a log in col. 1, lines 44-47.

With respect to claim 36, error determination is analogous to Stevens train controller sorting technique. The counter for counting the number of node measurement parameters in combination with comparison is analogous the error recognition, see col. 2, lines 38-45 and col. 4, lines 64 et seq.

### ***Response to Arguments***

Applicant's arguments filed 1-9-03 have been fully considered but they are not persuasive. The issue is whether or not the prior art reference to Stevens et al suggests **measuring the time between the receipt of the last RF transmission from a preceding railcar and the receipt of the pressure pulse.**

The examiner contends that this language is clearly met in Stevens, col. 2, lines 1-15, 30-45, col. 4, lines 17-55, for instance in col. 4, it is clearly realized that two

different kinds of signals (for instance rf and brake pressure) on two different mediums are transmitted along the length of the train. The car electronics 30 measures the time difference between the two signals, col. 4, lines 36-45, and as a result, determining the relative position on the railcar.

Accordingly, Stevens clearly provides that each railcar determines its relative position in the train based on the difference in time between the receipt of a pneumatic signal (second slower speed signal) originating from the HEU and the receipt of a wireless signal from the immediately preceding railcar.

The arguments that Stevens determines the relative position of the railcars as a function of the absolute time between the receipt of the syn signal and the pressure signal are not persuasive since Stevens does not mention absolute time.

Throughout Stevens disclosure the reference is made to **the difference in the two signals is measured and use for serialization**, the two signals being for example a wireless signal in the form of a syn signal and the other signal being in the form of pneumatic (pressure), see col. 4.

The claim language "receipt of a wireless signal from the immediately preceding railcar", clearly reads on Stevens car electronics 30 transmits the time difference on the trainline 10 to each of the other nodes and to the trainline controller 20, col. 4, lines 31-45.

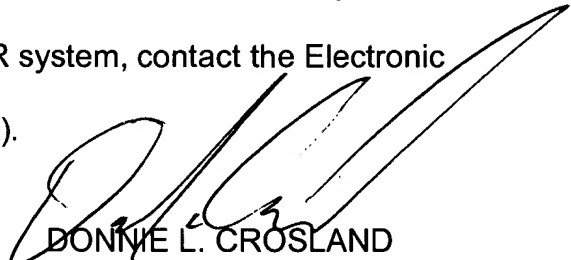
Accordingly, Stevens provides for measuring the time between the receipt of the last RF transmission from a preceding railcar and the receipt of a pressure pulse.

### **Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is (703) 305-4388. The examiner can normally be reached on Mon-Fri, 9:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFERY HOFSSASS can be reached on (703) 305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DONNIE L. CROSLAND  
Primary Examiner  
Art Unit 2636

Dlc   
703-305-4388